

# Chapter 4

# **Action Plan**

# **Chapter Summary**

This chapter organizes the findings of the previous chapters into an action plan, structured for both the watershed as a whole and for local level action.

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**Action Plan:** A "roadmap" laying out clear and organized stepts to accomplish a long-term goal.

# **Action Plan Structure**

### **Green Infrastructure Concept**

The open space plan identifies the most significant parcels for open space preservation and describes how these parcels might be tied together in an integrated vision providing improved water quality, flood damage reduction, increased public recreation, and protection of natural resources.

Through the process of evaluating and prioritizing open space parcels in the watershed, it became clear that many of the remaining open space parcels provide multiple watershed benefits that satisfy more than one open space plan goal. In addition to the value each individual parcel provides as open space, it is even more important to consider the collective value of the open space network. Therefore, key concepts for this action plan are connectivity and inclusiveness. Each parcel was examined not only for its own merits, but also to see if it would fit into the larger landscape. In this way every parcel would be part of an integrated whole, and each parcel would support the goals of other parcels.

For instance, a small parcel may have rated high for flood reduction or water quality goals. The question then arises: how might it fit into greenway and trail goals? Or the reverse: a key greenway parcel would be examined to see if it met, for instance, the flood reduction goal. Consideration of these interconnections has resulted in a plan that is comprehensive and strategic.

The connected open space parcels that form a greenway in the North Branch watershed are

the "green infrastructure" of the watershed as defined on the first page of this plan document. The North Branch green infrastructure system provides many benefits of great value to watershed residents that are difficult or impossible to replace. In addition to the benefits described below, well-planned green space has been shown to increase property values and decrease the cost of gray infrastructure (ex. stormwater management and water treatment) and public services.

Green infrastructure in the North Branch watershed provides both hydrological and ecological benefits for watershed communities.

**Hydrology**: Green infrastructure preserves the current watershed hydrology — both reducing flooding and sustaining water quality. Maintaining floodplain and wetlands as open land provides natural absorption and storage areas for runoff during a rain event. These natural storage areas keep runoff from flooding nearby homes and businesses, thereby preventing an increase in flood damage in the watershed. Upland open space areas (especially those with deep-rooted native plants) function in concert with lowland storage to prevent flood damage and sustain water quality by infiltrating rainfall and snowmelt to reduce the amount of runoff to the river during storm events. This infiltration also sustains groundwater levels and summer flow in the river during dry months. Native plants along waterways and wetlands absorb and filter pollutants in runoff before it reaches the river, and they stabilize the stream banks to keep them from eroding during fluctuations in water levels.

**Ecology:** Green infrastructure also sustains natural ecological process and provides quality habitat for wildlife and people in the watershed. Natural areas provide habitat for native plant communities and wildlife, and are the homes of rare plants and animals sustaining biodiversity in the North Branch. Natural areas provide habitat for humans as well. They provide residents with beautiful natural places to visit — and they also provide beautiful areas to live in or nearby.

**Quality of Life:** Natural areas are the best venue for outdoor education and passive recreation. They are the basis for a trail system to get people from place to place, and offer opportunities to exercise and watch wildlife — or to just enjoy being outdoors. Open lands also provide residents with active recreation opportunities such as golf, soccer and baseball among others. These recreation areas can also provide habitat and corridors for both wildlife and people.

Not least of the quality of life benefits of open space is the natural viewscapes it provides. Residents enjoy seeing open space as they travel within and through the watershed. One of the best views of this in the North Branch is seen by train as the North Central Metra line passes by Middlefork Savanna at sunrise.

The intent of this green infrastructure plan is to protect and enhance both the natural features and the hydrology of the watershed while allowing for planned development. Therefore, this green infrastructure plan provides the framework for both conservation and development in the watershed.

Over the past 50 years land development in the North Branch watershed has far out-paced conservation. As a result, open space parcels make up only 28% of the watershed today. With land development 50% of the wetlands in the watershed have been lost; only scattered remnants of the watershed's natural areas remain; flooding has become a chronic problem with more than 40 flood problem areas identified in Lake County alone; and water quality has been classified as poor in the Middle and West Forks of the North Branch and only fair in the Skokie River. Without action that includes a long-term commitment made by all watershed communities to preserve the watershed's green infrastructure, projected population and employment increases in the watershed over the next 20 years are guaranteed to reduce the percent of open space considerably, while exacerbating existing flood damage and water pollution problems. The threat of imminent loss of green infrastructure benefits, makes "now" the time for long-range planning and management of the watershed's green infrastructure. The Action Plan presented in this Chapter summarizes the action steps necessary for watershed stakeholders to cooperatively protect and enhance the green infrastructure system of the North Branch. This open space protection plan is designed not only to stem the tide of hydrology and quality of life problems in the watershed; it also identifies opportunity areas to implement best management practices to improve watershed conditions.

### **Green Infrastructure Assemblage**

In review, the following are the "puzzle pieces" used to assemble the open space (green infrastructure) plan for the North Branch.

#### **Approximately 15% of the watershed is protected open space:**

- 1,103 Existing Protected Open Parcels (8,528 acres): These lands, assembled principally by forest preserve districts, municipalities, and land trusts, form a series of nodes or "hubs" creating the framework for the plan. As such, they already embrace many of the plan goals, such as water quality/flood storage, recreation, and biodiversity.
  - Isolated parcels, such as large municipal parks and school grounds, are also important in that they can be linked into the overall open space plan through greenways that include new "feeder" trails.
- 111 Existing Protected Partially Open Parcels (818 acres): These are parcels having a structure on a relatively small part of the land, such as a field house on part of a local park.

# Approximately 23% of the watershed is unprotected open space or partially open space:

- **3,235 Existing Unprotected Open Parcels (8,421.26 acres)**: These parcels vary in size; 162 parcels (2,211 acres) ranked high in the prioritization.
- 835 Existing Unprotected Partially-Open Parcels (5,280.55 acres): These parcels provide trail and greenway linkages in critical areas and potential for buffering habitat and managing stormwater runoff.
- Utility and Transportation Rights-of-Way: These linear corridors are found in two forms:
  - 1. essentially open: the Commonwealth Edison transmission corridors, which contain only periodic towers
  - 2. already "developed" for other uses: existing arterial or secondary streets having sidewalks to connect to isolated open space within the watershed or existing greenways beyond the watershed
- **Existing Trail Systems:** All existing trails are incorporated into the plan, forming the base for an expanded watershed trail system.

# Open Space Protection, Management and Green Infrastructure Planning Concepts

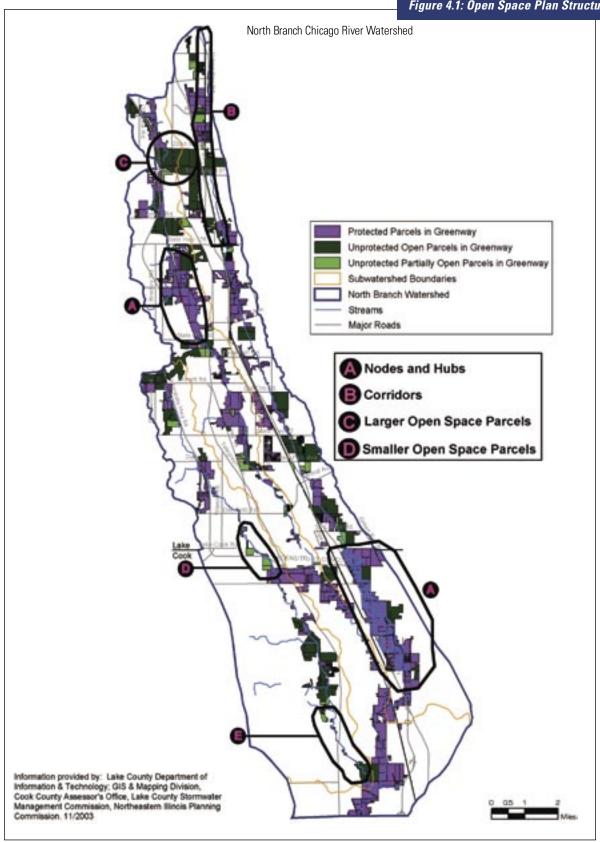
This Action Plan includes a summary of the factual information gathered in the inventory and analysis phases of this project, and provides both watershed and parcel-level open space protection and management recommendations. Protection recommendations focus on preserving currently unprotected open space in the watershed. Land management recommendations apply to both protected and unprotected open space and focus on opportunities to apply restoration/improvement projects to enhance both the benefits and value that existing open space provides to the watershed.

The following is a discussion of the general concepts that were used in developing this open space plan.

The open space plan is built off a series of nodes or "hubs" made up of large blocks of existing open space (*Figure 4.1, Example A*). This framework of existing nodes is then linked together by proposed greenway and trail corridors consisting of existing but unprotected open and partially open parcels, as well as smaller protected parcels. Partially open parcels such as utility rights-of-way (*Example B*) play a secondary role in this linkage, particularly at the northern and southern ends of the watershed.

In general, the open space plan recommends preservation of larger parcels in the northern third of the watershed, where significant opportunities for biodiversity preservation, wetland protection, and flood control still remain (*Example C*). Some of these opportunities can also be found in the middle third of the watershed, though much reduced in acreage (*Example D*). The southern third of the watershed principally provides opportunities for assembling small parcels for greenway and trail use (*Example E*), and landscape restoration on the large blocks of forest preserve already extant in this area.

Figure 4.1: Open Space Plan Structure



Interestingly, the planning process found that virtually all the highly rated open spaces fell within the north-south corridors along the three forks of the North Branch (providing linked greenway potential). Figure 4.2 (page 74) presents a map of the proposed greenway system for the watershed. Parcel-specific recommendations for inclusion in this greenway system are found within each of the municipal planning area sections that begin on page 97.

As mentioned above, many parcels ranked high for water quality or habitat and could also serve as greenway and trail connections. In other areas, particularly the northern third of the watershed, parcels ranking high for wetlands or biodiversity but that are outside of the immediate stream corridors are "captured" into the overall plan by linking them via parcels that are also suitable for trail connections. Figure 4.3 (page 75) depicts a potential trail system for the watershed that allows people to access and enjoy the North Branch's green infrastructure system. As with the greenways system, parcel-specific recommendations for trails are included in each of the planning area map sets at the end of this chapter. But please note that the proposed trail layout is conceptual, and the exact location and design for the trails will need to be determined on a site-by-site basis.

#### **A Human Note**

For the open space plan to succeed, it must involve people. The easiest way to bring awareness to the importance of open space is through trails.

A trail allows people to enjoy the watershed and river. A continuous trail allows travel between different areas. Different areas. once connected, become part of a comprehensive whole.

Trails thus allow people to experience the watershed in its entirety, and are the vehicle that generates support for local action. Multiple local actions lead to regional action: the accomplishment of this open space plan.

# Noteworthy

# **Methodology for Designing Proposed Greenway**

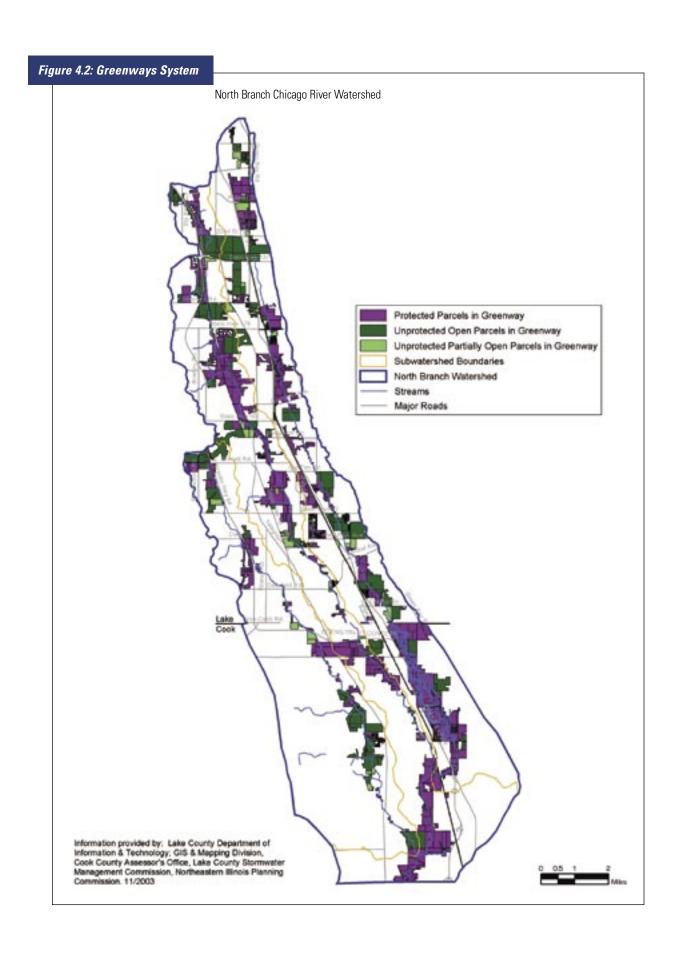
The proposed greenway design was completed in a multi-step process. First, plan goals and objectives were reviewed to identify key functional requirements for the greenway system. These plan objectives include:

- Goal 2 (Flood Damage Reduction), Objective 2: Prevent flood damage from worsening by maintaining all undeveloped floodplain as open space
- Goal 3 (Water Quality Improvement), Objective 1: Protect/restore riparian greenways/buffers along and around all water resources
- Goal 4 (Natural Resource Protection/Habitat Improvement), Objective 2: Provide buffer parcels for sites with rare, threatened or endangered species
- Goal 4, Objective 3: Protect high quality wetlands, Illinois Nature Preserves and Illinois Natural Inventory Sites from the impacts of on-site or adjacent development

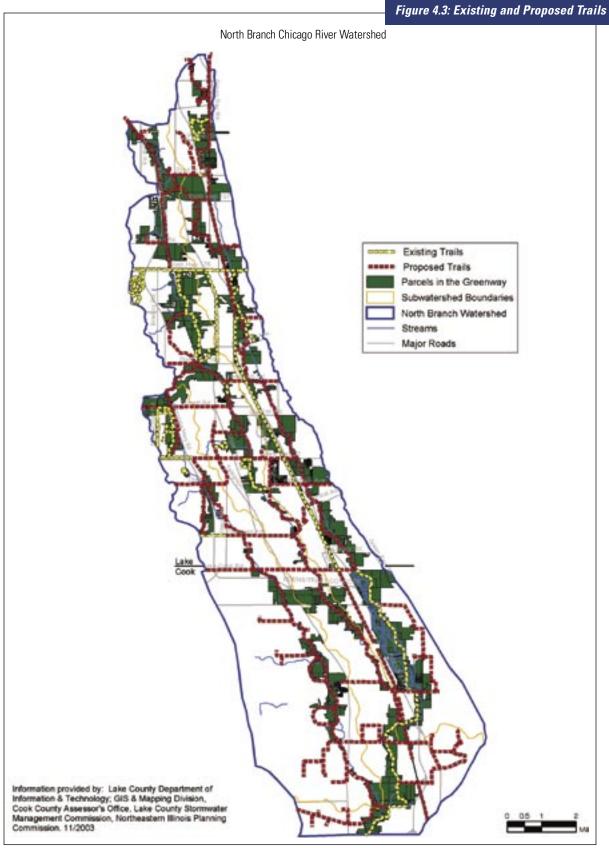
Criteria that would help locate parcels meeting these objectives were then identified. These criteria are as follows:

- Parcels intersecting with 100-year floodplain
- Parcels intersecting with wetlands
- Parcels intersecting with or adjacent to ADID wetlands
- Parcels within 100' of a watercourse
- Parcels intersecting with or adjacent to locations of threatened or endangered species
- Parcels intersecting with or adjacent to INAI sites
- Parcels intersecting with or adjacent to nature preserves
- Parcels intersecting with or adjacent to remnant landscapes
- Protected parcels
- Parcels adjacent to protected parcels
- Parcels adjacent to forest preserve district lands

The project GIS was then used to identify all parcels meeting at least one of the above criteria. At this point, a subjective design process was implemented. 'Candidate' parcels identified above were manually evaluated to determine which could be included in a greenway system. This evaluation also incorporated other plan objectives (i.e., Goal 5, Objective 2: Connect open space areas with conservation corridors). Parcels offering such an opportunity received a 'greenway' value in the GIS. Parcels that met one or more of the above criteria but were outlying or isolated were removed from the greenway. No less important, these parcels will play a critical role in addressing other plan goals such as flood reduction or community open space. Conversely, a number of open space parcels that did not meet any of the above criteria were included in the greenway design, typically serving as corridor 'connectors'. Partially open parcels (both protected and unprotected) were also evaluated; those that could serve as habitat buffers or trail connections were included in the greenway design.







# **Summary of the Watershed Open Space Inventory by Community**

Table 4.1 presents a summary of land and open space acres per municipal and unincorporated county area in the North Branch watershed. (Communities that have greater than 200 acres of unprotected open space are highlighted in bold.)

The greatest opportunity for preserving open space in the watershed is in Highland Park, Lake Forest and unincorporated Lake County where more than 1,000 acres of unprotected open space were inventoried in each. The greatest opportunity for open space preservation in Cook County is in the Villages of Northbrook and Glenview, which have 688 acres and 872 acres of unprotected open space respectively.

It is interesting to compare the amount of acreage each community would need to protect to meet the overall watershed goal of 25% of their land in protected open space (column 4) with the acres of protected open space within each community (meaning that it will remain as open space — column 5) and with the percent of open space by community that has been protected (column 6). Currently only three communities (Glencoe, Lake Bluff and Unincorporated Cook County) have sufficient protected open space to meet or exceed the watershed goal of 25% protected open space within their community. It is also clear to see with this comparison that there are still opportunities to collectively preserve a significant amount of open space in the watershed — even communities with a relatively low percentage of watershed land area have a role to play in preserving open space.

By comparing columns 3 & 4 of the table, you can see that approximately one half of the watershed's communities have less than 25% of their land area in the watershed still in open space. Deerfield (-468 acres), Glenview (-524 acres), Northbrook (-388) and Wilmette (-302) have the greatest acreage deficits. In reviewing column 8 of the table you can see that three of these four communities have a relatively high percentage of unprotected open space that can still be preserved: Glenview (66%), Northbrook (48%) and Deerfield (58%). Also of note, a greater percent of the remaining open space in unincorporated Cook County is protected (80%), as compared to unincorporated Lake County where only 39% is protected.

# In summary:

- 1. Although the North Branch watershed has been largely suburbanized, there remain opportunities to preserve a significant amount of open space in approximately one half of the municipal and unincorporated jurisdictions in the watershed (200–1200 acres each).
- 2. Unincorporated Lake County, Lake Forest, Highland Park, Glenview and Northbrook are the jurisdictions in the watershed that have the greatest opportunity to preserve open space.
- 3. Only Glencoe, Lake Bluff and Unincorporated Cook County meet or exceed the watershed goal to have 25% of land in protected open space. Deerfield, Glenview, Lake Forest and Northbrook have the greatest need and opportunity

- to protect open space as they each have more than 500 acres to protect to meet the 25% watershed goal.
- 4. Cook County has protected more unincorporated land as open space than Lake County has, but there is greater opportunity for protecting open space in Lake County.

**Table 4.1 Community Open Space Summary** 

Column	1	2	3	4	5	6	7	8
Watershed Jurisdiction	Watershed Acres	% of W-shed	Open Space Acres	Acres of Open Space Needed to Meet 25% W-shed Goal	Protected Open Space Acres	% of Open Space Protected	Unprotected Open Space Acres	% of Open Space Unprotected
Bannockburn	1309	2.2%	279	327	105	37.5%	175	62.5%
Deerfield	3481	5.7%	402	870	169	42.0%	233	58.0%
Evanston	9	0.0%	0	2	0	0.0%	0	100.0%
Glencoe	1499	2.5%	706	375	468	66.2%	238	33.8%
Glenview	7338	12.1%	1311	1834	439	33.5%	872	66.5%
Golf	285	0.5%	190	71	2	1.0%	188	99.0%
Green Oaks	1775	2.9%	608	444	233	38.3%	375	61.7%
Gurnee	111	0.2%	18	28	0	0.0%	18	100.0%
Highland Park	5334	8.8%	1614	1333	604	37.5%	1009	62.5%
Highwood	147	0.2%	6	37	0	0.0%	6	100.0%
Kenilworth	42	0.1%	0	10	0	0.0%	0	100.0%
Lake Bluff	980	1.6%	324	245	247	76.2%	77	23.8%
Lake Forest	8166	13.5%	2613	2042	1505	57.6%	1108	42.4%
Lincolnshire	710	1.2%	184	178	87	47.3%	97	52.7%
Mettawa	716	1.2%	432	179	165	38.2%	267	61.8%
Morton Grove	1987	3.3%	382	497	361	94.5%	21	5.5%
Niles	103	0.2%	0	26	0	0.0%	0	100.0%
Northbrook	7251	12.0%	1425	1813	737	51.7%	688	48.3%
North Chicago	2020	3.3%	750	505	326	43.5%	424	56.5%
Northfield	1885	3.1%	306	471	167	54.8%	138	45.2%
Park City	487	0.8%	81	122	0	0.0%	81	100.0%
Riverwoods	943	1.6%	339	236	151	44.5%	188	55.5%
Skokie	967	1.6%	345	242	69	19.9%	277	80.1%
Waukegan	2087	3.4%	641	522	265	41.4%	376	58.6%
Wilmette	1962	3.2%	189	491	151	80.1%	38	19.9%
Winnetka	1581	2.6%	346	395	293	84.5%	54	15.5%
Unincorp. Lake	4289	7.1%	1989	1072	786	39.5%	1203	60.5%
Unincorp.Cook	3194	5.3%	1482	799	1198	80.8%	284	19.2%
Totals	60,657	100.0%	16,962	15,164	8,528		8,434	

Table 4.2 presents the number of acres identified as high and medium priority for protection by community. Those communities that have the highest acreages of unprotected high and medium priority open space parcels are highlighted in bold.

Unincorporated Lake County, Highland Park, North Chicago, Glencoe and Golf are the five watershed communities with the greatest acreage of high priority open space. In addition, Lake Forest, Unincorporated Lake County, Glenview and Highland Park have more than 400 acres each of medium priority open space remaining.

**Table 4.2 Prioritization Summary by Community** 

Watershed Jurisdiction	# High Priority Open Space Parcels	Acres of High Priority Open Space	# High Priority Unprotected Open Space Parcels	Acres of High Priority Unprotected Open Space	# Medium Priority Open Space Parcels Acres of	Medium Priority Open Space	# Medium Priority Unprotected Open Space Parcels	Acres of Medium Priority Unprotected Open Space
Bannockburn	9	87.57	0	0.00	12	77.11	11	60.27
Deerfield	10	75.97	4	47.98	28	98.06	16	33.56
Evanston	0	0.00	0	0.00	0	0.00	0	0.00
Glencoe	13	514.23	6	192.93	8	149.03	4	13.43
Glenview	17	190.72	3	7.20	74	568.28	53	438.62
Golf	1	184.68	1	184.68	0	0.00	0	0.00
Green Oaks	8	123.81	7	99.94	29	298.40	17	146.32
Gurnee	0	0.00	0	0.00	22	15.28	22	15.28
Highland Park	43	669.47	24	451.15	168	701.41	110	423.83
Highwood	0	0.00	0	0.00	0	0.00	0	0.00
Kenilworth	0	0.00	0	0.00	0	0.00	0	0.00
Lake Bluff	39	243.29	31	25.45	155	100.09	144	73.25
Lake Forest	76	1044.43	11	138.46	139	986.42	72	485.61
Lincolnshire	10	109.50	3	28.90	21	40.37	18	35.08
Mettawa	6	107.10	4	50.96	12	195.49	7	111.36
Morton Grove	23	330.32	1	6.44	12	22.93	4	0.78
Niles	0	0.00	0	0.00	0	0.00	0	0.00
Northbrook	42	442.42	7	76.09	73	528.88	42	232.59
North Chicago	21	411.11	14	230.46	83	284.25	44	172.38
Northfield	37	170.28	3	6.40	33	28.29	27	26.07
Park City	5	44.94	5	44.94	8	30.03	8	30.03
Riverwoods	9	146.20	5	34.08	24	124.81	21	118.38
Skokie	3	49.50	1	0.12	2	1.88	2	1.88
Waukegan	27	272.59	10	38.61	40	58.10	37	39.22
Wilmette	8	107.62	4	3.27	8	2.89	7	0.19
Winnetka	18	235.02	0	0.00	25	63.76	4	30.45
Unincorp. Lake	40	967.19	15	513.59	106	746.04	84	421.05
Unincorp.Cook	62	1182.09	3	29.08	16	209.31	14	167.81
Totals	527	7710.05	162	2210.73	1098	5331.11	768	3077.44

Due to the multi-jurisdictional nature of this plan, and the difficulties facing any one stakeholder to significantly advance open space protection in the watershed on their own, successful implementation of this plan will depend on each stakeholder jurisdiction committing resources and coordinating with others to protect the open space parcels recommended by this plan. The action plan recommends the formation of a council of Coordinators to facilitate coordination and implementation of the action plan at the community level. Each of the key implementation stakeholders will be asked to designate and support a Coordinator from their respective community, district or organization. The Coordinator should be an existing staff, Board or Committee member from the community that works closely with the planning department and the chief administrator of the community or district. The Coordinator duties will be two-fold, the Coordinator will:

- 1. Champion (promote and facilitate) open space planning and protection within their jurisdiction or organization; and will
- 2. Periodically meet with other community Coordinators to identify, develop and package joint land protection, open space watershed enhancement, and greenway and trail projects.

# Watershed-Level Open Space Action Plan

The following multi-part action plan includes both general and specific programmatic recommendations for the watershed (Green Infrastructure Action Plan), and contains parcel-specific recommendations for each stakeholder community that are mapped and presented by Planning Area (see the parcel-level open space action plan beginning on page 97).

The Green Infrastructure Action Plan (Action Plan) is a summary of watershed-level programmatic action recommendations that integrate project findings with goals and objectives for plan implementation. Table 4.4 at the end of this section presents the watershed Action Plan for preserving and enhancing open space. Within the Action Plan table, the action steps are organized by plan goal. (Note, the plan goals are numbered 1 through 7 for reference purposes only and do not reflect a prioritization.) The table also presents the stakeholder(s) responsible for taking the lead to implement the action item, a target date for implementation and the relative priority of each action.

While there are a number of action steps in the Action Plan that speak to the need and opportunity to restore and enhance existing open land that is held by the forest preserve and park districts, golf clubs, the Great Lakes Naval Base, schools, and others in the watershed — protecting high priority unprotected open space parcels is the highest priority of this Action Plan. Protecting open space to meet the 25% watershed goal set out in the 2000 watershed plan is the most important goal of this watershed-based open space planning effort. As a result, most of the action recommendations are geared toward meeting this land protection goal.

The high priority action steps that make up the core of a successful open space protection program in the watershed are as follows:

1. Identify those open space parcels that are at greatest risk - i.e. those that absent action are expected to be developed by 2010.

Watershed municipalities, Lake and Cook County will review their comprehen-

- sive land use plans and zoning maps and compare to the parcel-level open space recommendations in the appropriate Planning Areas section of this plan.
- **2.** Acquire high priority properties for conservation purposes. The Lake County Forest Preserve District will add one new forest preserve in the northern portion of the Middle Fork subwatershed, and acquire a West Fork subwatershed headwaters property to add to and connect with existing forest preserve properties in the Des Plaines watershed.
- **3. Protect all medium and high priority parcels of undeveloped floodplain as open space.**Drainage Districts, Park Districts and Municipalities will work together to protect floodplain by outright acquisition or through purchase or donation of drainage or conservation easements.
- 4. Municipalities, county, and forest preserve and park districts will actively use the open space plan. The North Branch Plan Committee will work with municipalities individually to determine how the open space plan fits into other community plans and their land development approval process, and will encourage incorporation of open space protection recommendations in these community plans and processes.
- 5. Watershed municipalities will develop and map a green infrastructure plan for their communities using the watershed open space plan as their basis. Communities will incorporate the green infrastructure plan into their comprehensive land use plan; they will identify the highest priority parcels for protection; develop associated community action recommendations; and will include green infrastructure implementation projects in their annual budget.
- 6. Watershed municipalities and counties will protect high quality wetlands, nature preserves and natural areas from the impacts of on-site or nearby development by using a conservation/green infrastructure overlay zone. Communities will develop and implement a conservation/green infrastructure overlay zone that includes minimum open space requirements and alternative development practices that apply to all high quality natural areas and water resources. Once developed, the community will add the overlay zone onto local land use zoning maps, comprehensive land use plan maps, and will include the overlay development requirements in their review processes.
- 7. Determine the feasibility of creating additional runoff storage on open space parcels adjacent to or near existing flood problem areas. Municipalities will take the lead on identifying potential local detention projects where additional storage would reduce flood damage in their jurisdiction.
- 8. Determine the feasibility of using Prairie Wolf and the Lake Bluff Forest Preserves for flood storage. Lake County Stormwater Management Commission (SMC), the Drainage Districts and Illinois Department of Natural Resources-Office of Water Resources will determine whether additional storage is feasible, cost-effective and will significantly reduce flood damage.

- **9. Install best management practices (BMPs) to improve water quality in the North Branch of the Chicago River.** SMC, Friends of Chicago River (Friends) and the BMP Selection Team will work cooperatively to identify open and partially open parcels along the river that are high priority for water quality BMPS and will contact landowners and the corresponding municipality to inform them of cost-share funding opportunities and determine interest in BMP projects.
- 10. The North Branch Plan Committee will provide key land acquisition organizations with a map of high quality areas that should be protected in order to sustain biodiversity in the watershed. The Plan Committee will identify and map unprotected open space parcels with high biodiversity, or potential for high biodiversity, and provide information to land acquisition organizations such as Forest Preserves and Park Districts.
- 11. Organize a cooperative effort to protect greenway corridors throughout the watershed.

  The North Branch Plan Committee will convene a meeting of park, forest preserve and drainage districts and private clubs and land trust property owners that fall within the prospective greenway to brainstorm, identify opportunities and develop a strategy for cooperative ventures to protect and connect the greenway corridors within each tributary subwatershed.
- 12. Develop a land preservation resource center that is available to the North Branch Plan Committee and watershed communities. The North Branch Planning Committee, SMC and Friends will cooperate to research potential open space preservation strategies and fund sources. They will identify those that are applicable in the North Branch watershed and disseminate information to appropriate lead stakeholders.
- 13. Identify funding mechanisms and work cooperatively to provide cost-share funding for protecting open space included within a community's green infrastructure plan. The North Branch Planning Committee will facilitate multi-partner open space funding proposals and provide an entrée for cooperative multi-jurisdiction projects.

The Action Plan table that follows includes the core actions listed above in addition to a number of recommendations that supplement these core activities to complete the plan. The following Table 4.3 is a list of the abbreviations used in the action plan table to designate the watershed partner(s) that have been identified as having lead responsibility for implementation of each action recommendation.

**Table 4.3 Key Open Space Stakeholders** 

Acronym/Abbreviation	Action Plan "Lead"
BST	BMP (Best Management Practice) Selection Team a committee of the NBPC that reviews and makes funding recommendations for watershed projects.
CCFPD	Cook County Forest Preserve District
Conservation Organizations	Lake Forest Open Lands (Lake Forest land trust), Lake Bluff Open Lands (Lake Bluff land trust), Openlands (Chicago region open lands advocate), Corlands (Chicago region land trust).
Coordinator	Person designated by a community who is responsible for watershed open space planning and implementation.
Counties	Lake & Cook Counties
CRSN	Chicago River Schools Network (Network of teachers organized by Friends of Chicago River to use a river-based curriculum.)
cw	Chicago Wilderness: alliance of Chicago area organizations promoting conservation of natural areas and protection of biodiversity.
Drainage Districts	East Skokie Drainage District, West Skokie Drainage District, Union Drainage District #1 West Fork, Union Drainage District Middle Fork
Friends	Friends of Chicago River
Futurity	Futurity, Inc. is the contractor that worked with the planning committee to develop this plan.
GLNTC	Great Lakes Naval Training Center
Golf Courses	There are more than 30 golf courses in the watershed.
IDOT	Illinois Department of Transportation
IDNR-C2000	Illinois Department of Natural Resources — Ecosystems Program, Conservation 2000
IDNR-OWR	Illinois Department of Natural Resources — Office of Water Resources
LCDOT	Lake County Department of Transportation
LCFPD	Lake County Forest Preserve District
Municipalities	26 municipalities have jurisdictional area in the North Branch watershed
NBOSC	North Branch Open Space Committee (NBPC committee) provided advice and guidance during the development of this open space plan.
NBPC	North Branch Planning Committee (stakeholder group) provides oversight and guidance for planning and projects in the watershed.
Park Districts	Highland Park, Lake Forest (Department), Lake Bluff, Foss, Waukegan, Gurnee, Deerfield, Northbrook, Glenview, Northfield, Wilmette, Winnetka, Glencoe, Morton Grove
SMC	Lake County Stormwater Management Commission
USFWS	US Fish & Wildlife Service
Wild Ones	Lake-to-Prairie Wild Ones is the local chapter of a national organization that promotes native plant landscapes.

Note: following the programmatic Action Plan (Table 4.4) are the detailed maps and parcelspecific recommendations in the "Parcel-Level Open Space Action Plan" section where the North Branch watershed is divided into 14 planning areas (Figure 4.4), generally consisting of two to three municipalities clustered together or, depending on size, a single municipality.

### **TABLE 4.4 Watershed Green Infrastructure Action Plan**

### **GOAL 1: PRESERVE OPEN SPACE IN THE NORTH BRANCH CHICAGO RIVER WATERSHED**

#### **OBJECTIVES:**

### 1. Develop a parcel-based inventory of vacant land and open space for the watershed.

FINDINGS: The parcel-based open space inventory identified:

- 16,962 acres of open space (4,338 parcels). Of this, 50% (8,528 acres 1,103 parcels) are protected and 8,421 acres (3,235 parcels) are unprotected.
- 6,099 acres of partial open space (946 parcels). Of this, 13% (818 acres 111 parcels) are protected and 5,281 acres (835 parcels) are unprotected.\*

<sup>\*</sup>Note that the area calculations for partially open parcels are for the entire parcel (including the developed portion).

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
1A. Complete parcel-level open space inventory	Futurity	2003	High	Complete
1B. Distribute inventory to watershed partners in paper and digital format.	Friends, SMC	2005	High	Draft

### 2. Identify open space parcels that communities have designated for future development.

**FINDINGS:** All unprotected open space is at risk.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
2A. Review community comprehensive land use plans and zoning maps and compare to parcel recommendations in the appropriate planning areas section of the open space plan. Identify those parcels at greatest risk — i.e. those that are expected to be developed by 2010.	Area 1: Waukegan, Park City, Gurnee Area 2: Lake County Area 3: N. Chicago, Lake Bluff, GLNTC Area 4: Green Oaks Mettawa Area 5: Lake Forest Area 6: Highland Park Area 7: Lincolnshire Bannockburn Riverwoods Area 8: Deerfield Area 9: Northbrook Area 10: Glencoe, Winnetka Area 11: Morton Grove, Golf Area 12: Glenview Area 13: Skokie, Wilmette Area 14: Northfield	8/2006	High	

# 3. Protect a total of 15,162 acres in the watershed as open space (to meet the "25% of watershed" objective in the watershed plan).

**FINDINGS**: 9,346 acres of open and partial open space are currently protected. The plan calls for preserving an additional 5,480 acres (957 parcels). This would bring the total amount of protected open space to 14,665 acres (24% of the watershed). Additionally, 1,380 acres of partially open parcels (213) are recommended for preservation. Of this, only 498 acres need to be preserved in order to achieve the objective of protecting 25% of the watershed (15,162 acres) as open space.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
3A. Work with municipalities, county, and forest preserve and park districts to actively use (and eventually adopt) the open space plan.	NBPC	2006	High	

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
3B. Develop a procedure for municipalities to integrate the parcel level inventory and open space preservation recommendations in this plan into the development proposal process (ex. pre-application, pre-annexation etc.).	NBPC	2006	Medium	
3C. Track the status of open space protection and conservation open space in the watershed to determine if plan goals are being met.	NBPC	ANNUAL	Medium	
3D. Hold annual meeting with key stakeholders to review the status of open space protection in the watershed.	NBPC	ANNUAL	Medium	

### 4. Protect 9,098 acres (of the total 15,162 acres) of open space in the watershed as conservation open space (to meet the "15% of watershed" objective in the watershed plan).

FINDINGS: There are 6,236 acres of open and partially open parcels used for passive recreation. Of these, 6,103 are protected. An additional 133 acres of open and partially open parcels are used for passive recreation but are unprotected. Select/preserve additional 2,996 acres from the open space inventory to meet the 15% goal.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
4A. Incorporate open space areas with parcels of high natural resource value for conservation protection into Forest Preserve and Park District land acquisition plans.	Cook & Lake Co. Forest Preserve Districts, Park Districts	2006	High	
4B. NBPC will sponsor a training workshop(s) with municipalities, park districts and conservation groups on how to develop a land preservation agreement program to protect private properties as conservation open space.	NBPC, Coordinators	2007	Medium	
4C. Investigate opportunities for preserving open land that is owned by the Tollway authority along I-94.	NBPC, LCFPD, FPDCC	2006	Medium	

# 5. Add 2,717 acres of land in the watershed to the Lake County Forest Preserve District (LCFPD) by 2030 to meet the Forest Preserve District goal of 40 acres per 1,000 people (at the watershed-level). (These additional acres will make up part of the total 15,162 acres in conservation open space).

FINDINGS: LCFPD currently owns 1.842 acres of land in the watershed (22% of the protected open space). The LCFPD should preserve open space adjacent to existing forest preserves, as well as several additional large isolated tracts of high-quality and remnant landscapes as identified by the plan.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
5A. Review Planning Area, Remnant Parcels and biodiverse areas maps to identify potential additions to existing forest preserves and opportunities for creation of new forest preserves in the watershed. Incorporate into forest preserve land acquisition plans.	Forest Preserve Districts	2005	Medium	
5B. Acquire property to add one new forest preserve in the northern portion of the Middle Fork subwatershed.	LC Forest Preserve District	2009	High	
5C. Acquire West Fork subwatershed headwaters property to add to and connect with existing forest preserve properties in the Des Plaines watershed.	LC Forest Preserve District	2009	High	
5D. Investigate feasibility of acquiring IDOT parcel in Skokie subwatershed.	LC Forest Preserve District, IDOT	2009	Medium	

# 6. Adopt conservation design standards for all new development in designated high-priority open space areas to maximize protection of high priority open space.

**FINDINGS:** No community in the watershed specifically requires or advocates conservation design, although Lake Forest does encourage it in its Historic, Residential and Open Space ordinance. Lake County allows for conservation design subdivisions. The plan calls for the adoption of conservation development standards by the County and each municipality as a watershed-wide policy, planning, and zoning initiative.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
6A. Develop conservation development standards for high priority open space parcels/areas and distribute to municipalities.	NBPC	2006	Medium	
6B. Adopt conservation development standards, which may include conservation zoning and/or a conservation development ordinance or conservation overlay district for high priority open space parcels.	Municipalities/ Lake & Cook County	2006	Medium	

### **GOAL 2: REDUCE FLOOD DAMAGE**

#### **OBJECTIVES:**

### 7. Inventory undeveloped floodplain that is not currently protected from development.

**FINDINGS:** There are 1,022 open parcels (9,138 acres) that intersect with the 100-year floodplain. Of this, 62%, 485 parcels (5,658 acres) are protected and 537 parcels (3,480 acres) are unprotected.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
7A. Identify undeveloped floodplain parcels and determine which are protected vs. unprotected as open space.	Futurity	2003	High	Complete

#### 8. Prevent flood damage from worsening by maintaining all undeveloped floodplain as open space.

**FINDINGS:** The plan calls for the protection of all open floodplain.

- 4,231 acres (of the total 9,138 acres of the open space parcels intersecting with floodplain) is mapped as 100-year floodplain.
- -72% (3,054 of the 4,231 acres) of floodplain is protected open space, and 1,177 acres (28%) is unprotected open space in the floodplain.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
8A. Recommend communities adopt floodplain overlay zoning that prohibits development in the 100-year floodplain. If strict prohibition is considered too restrictive, at minimum any new development should meet "no adverse impact" standards.	Municipalities	2005	High	
8B. Protect all medium and high priority parcels of undeveloped floodplain as open space by outright acquisition or through purchase or donation of drainage or conservation easements.	Drainage Districts, Municipalities, Park Districts	2010	High	

# 9. Identify open space parcels suitable for wetland restoration, detention basins and/or flood storage that are adjacent to or near known flood problem areas.

#### **FINDINGS:** There are:

- 1,605 open parcels (6,626 acres), within 0.5-mile radius of flood problem areas.\*
- 197 partially open parcels (2,163 acres) within 0.5- mile radius of flood problem areas.\*
- \* Statistic only applies to Lake County portion of watershed. The plan identifies opportunities for wetland restoration, detention basins and/or flood storage adjacent to or near known flood problem areas.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
9A. Investigate flood problem areas on a site-by-site basis to determine whether additional storage would relieve flooding at the site.	Municipalities, GLNTC, SMC, Drainage Districts	2006	Medium	
9B. Determine the feasibility of additional storage on nearby open space parcels for flood problem areas where storage would reduce flood damage.	Municipalities, GLNTC	2010	High	
9C. Identify opportunities for additional storage on golf course properties along the river.	Golf Courses, GLNTC,	Municipalities	2006	Medium
9D. Determine the feasibility of using Prairie Wolf and the Lake Bluff Forest Preserves for flood storage.	SMC, East Skokie DD, West Skokie DD, IDNR-OWR	2006	High	

#### **GOAL 3: IMPROVE WATER QUALITY**

#### **OBJECTIVES:**

# 10. Protect/restore riparian greenways/buffers along and around all water resources.

#### FINDINGS: There are:

- 586 open parcels (6,948 acres) within 100' of a watercourse. Of this, 327 parcels (4,722 acres) are protected and 259 parcels (2,226 acres) are unprotected.
- 116 partially open parcels (1,719 acres) within 100' of a watercourse. Of this, 18 parcels (400 acres) are protected and 98 parcels (1,319 acres) are unprotected.

Large sections of the three forks themselves are in need of bank re-grading and stabilization.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
10A. Identify high priority areas along streams for riparian corridor restoration.	Friends, SMC	2005	Medium	
10B. Remove invasive plants, stabilize streambanks and restore minimum 50-foot native riparian corridor along streams and 50-foot native wetland buffer on high priority open space parcels with wetlands.	Drainage Districts, Landowners, GLNTC, Golf Courses	2010	Medium	
10C. Develop and adopt long-term monitoring and maintenance plans for channels and riparian buffers.	Drainage Districts, Municipalities, Forest Preserve Districts, GLNTC	2006	Medium	

# 11. Identify open space parcels in proximity to water resources that are suitable for best management practices to infiltrate or filter stormwater runoff.

# FINDINGS:

- There are numerous existing detention basins in the watershed that can be "retrofitted" to provide better water quality.
- There are many opportunities for wetland and landscape restoration to improve the retention, absorption, and quality of runoff before it reaches the streams themselves.

The plan identifies numerous open and partially open parcels, ranging from forest preserves down to homeowner association outlots and detention basins, where BMPs could be applied.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
11A. Identify open/partial open space parcels along the river that are high priority for BMPs as project opportunities are pursued.	SMC, Friends, BST	2006	Medium	
11B. Contact landowners of parcels that are high priority for water quality BMPS and the corresponding municipality to inform them of cost-share funding opportunities and determine interest in BMP projects.	SMC, Friends, BST	2007	Medium	
11C. Install water quality BMPs at 5 high priority open space sites (investigate golf courses and park properties as potential opportunity sites).	SMC, Friends, BST	2008	Medium	

# 12. Install best management practices on parcels with open space that include or are adjacent to nonpoint source pollution hotspots or pollution point sources (National Pollutant Discharge Elimination System permitted facilities).

FINDINGS: There are:

- 646 open parcels (1,635 acres) intersecting with non-point pollutant loading hotspot stormsewersheds.
- 270 partially open parcels (1,135 acres) intersecting with non-point pollutant loading hotspot stormsewersheds.

The plan calls for full use of appropriate open and partially open parcels to manage non-point source pollution hotspots.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
12A. Identify open/partial open space parcels in non- point pollution hotspot stormsewersheds, or that are on or adjacent to those point source NPDES permit sites that are the highest priority for BMPs.	SMC, Friends, BST SMC, Friends, BST	2006	Meduim Medium	
12B. Contact landowners of these parcels and the corresponding municipality to inform them of cost-share funding opportunities and determine interest in BMP projects.				

### **GOAL 4: PROTECT HIGH QUALITY NATURAL AREAS AS OPEN SPACE**

### **OBJECTIVES:**

# 13. Identify open space parcels with high biodiversity or the potential for high biodiversity.

**FINDINGS:** The biodiversity inventory revealed:

- 3,913 acres with high biodiversity (T/E species, INAI sites and nature preserves). Of this, 1,323 acres are unprotected.
- 3,017 acres with potential for high biodiversity ('remnant landscapes'). Of this, 866 acres are unprotected.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
13A. Complete biodiversity inventory.	Futurity	2003	High	Complete
13B. Identify and map unprotected open space parcels with high biodiversity or potential for high biodiversity and provide information to land acquisition organizations such as Forest Preserves and Park Districts, land protection/conservation groups, and to municipalities and counties for land planning purposes.	NBPC	2006	High	
13C. Incorporate identified rich biodiversity areas into land acquisition/ protection plans.	Forest Preserves, Park Districts	2006	Medium	

# 14. Provide buffer parcels for sites with threatened or endangered species.

**FINDINGS:** The biodiversity inventory revealed 581 acres of unprotected parcels (462 acres of open parcels and 119 acres of partially open) adjacent to sites with T/E species. The plan calls for the protection of key unprotected parcels adjacent to sites with T/E species.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
14A. Deterrmine appropriate buffer recommendations for each T&E species.	IDNR, USFWS	2006	Medium	
14B. Protect buffers on parcels adjacent to sites of T&E species with conservation easements.	NBPC, Forest Preserves, Park Districts	2010	Medium	

# 15. Protect high quality wetlands, Illinois Nature Preserves and Illinois Natural Inventory Sites from the impacts of on-site or adjacent development.

**FINDINGS:** The biodiversity inventory revealed:

- 1,853 acres of open parcels intersecting with or adjacent to high quality wetlands.\*
- Of this, 69% (1,272 acres) are protected and 581 acres are unprotected.
- 320 acres of partially open parcels intersecting with or adjacent to high quality wetlands.\* None of these parcels are protected.
- 2,387 acres of open parcels intersecting with or adjacent to Illinois Nature Preserves and Illinois Natural Inventory Sites. Of this, 75% (1,795 acres) are protected and 592 acres are unprotected. (All Nature Preserves are protected.)
- 347 acres of partially open parcels intersecting with or adjacent to Illinois Nature Preserves and Illinois Natural Inventory Sites. Of this, 3% (10 acres) are protected and 337 acres are unprotected. (All Nature Preserves are protected.)

The plan calls for the protection of:

- 575 acres of open parcels intersecting with or adjacent to high quality wetlands.\*
- 134 acres of partially open parcels intersecting with or adjacent to high quality wetlands.\*
- 580 acres of open parcels intersecting with or adjacent to Illinois Natural Inventory Sites.
- 122 acres of partially open parcels intersecting with or adjacent to Illinois Natural Inventory Sites.

<sup>\*</sup>Statistic only applies to Lake County portion of watershed where an Advanced Identification (ADID) wetland inventory has been completed.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
15A. Develop and recommend implementation of a conservation/green infrastructure zone overlay that includes all high quality natural areas and incorporate into local land use zoning maps, comprehensive land use plans and proposed development review processes.	Municipalities, Counties	2006	High	

# 16. Permanently protect all sites with high quality natural communities, high biodiversity and threatened or endangered species.

**FINDINGS:** As noted above, the biodiversity inventory revealed that the following are unprotected:

- 1,323 acres with high biodiversity (T/E species and INAI sites).
- 866 acres with potential for high biodiversity ('remnant landscapes').

The plan calls for the protection of key sites with high quality natural communities, high biodiversity and threatened or endangered species.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
16A. Acquire or protect with land preservation agreements the 1,323 acres identified as having high biodiversity.	Forest Preserves, Park Districts, Conservation Organizations	2010	High	
16B. Acquire or protect with land preservation agreements the 866 acres of remnant landscape identified as having potential for high biodiversity.	Forest Preserves, Park Districts, Conservation Organizations	2010	Medium	

#### **OBJECTIVES:**

# 17. Identify opportunities for habitat improvement on existing open space and partially open space parcels such as business parks, schools and other institutions, forest preserves, parks and golf courses.

**FINDINGS:** The open space inventory identified thousands of acres of existing, permanently protected open space that, if properly managed, would protect and improve existing habitat throughout the watershed.

- There are 13 forest preserves in Cook County (3,000 acres) and 8 forest preserve properties in Lake County (1,800 acres) in the watershed;
- Private Clubs own 2,754 acres of open space in the watershed;
- Park Districts own 1,741 acres of open space in the watershed; and
- School Districts own more than 1,000 acres of open and partially open parcels.

Numerous acres of open space held by both public and private large area landowners are in need of the commencement or continuation of accepted native habitat and hydrology management and restoration. Private clubs, park district and municipal golf courses offer many opportunities for enhancing open space benefits. Of the forest preserve districts, Cook County in particular needs improved restoration and management attention: refer to The Forest Preserve District of Cook County: Study and Recommendations, Friends of the Forest Preserves and Friends of the Parks, March 2002 (Phase I) and October 2002 (Phase II).

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
17A. Identify which forest preserve and park district properties in the watershed have current management and restoration plans for wildlife habitat and which do not.	NBPC	2005	Medium	
17B. Develop management and restoration plans for the Cook and Lake County forest preserve district and park district properties that currently do not have a wildlife habitat restoration plan.	Forest Preserves, Park Districts	2007	Medium	
17C. Develop conceptual designs for restoration/habitat improvement at all of the forest preserves and at least 5 of the park sites in the watershed.	Forest Preserves, Park Districts, NBPC	2010	Medium	
17D. Enroll golf courses in the watershed in Audubon Sanctuary or a similar environmentally sustainable property management program.	Golf Courses, GLNTC	2010	Medium	
17E. Work cooperatively to develop a funding assistance program that provides cost-share funding targeted for habitat improvement that also accomplishes infiltration and water quality functions on private and public open spaces that are currently managed as lawn.	NBPC, Chicago Wilderness, Wild Ones, IDNR Conservation 2000	2008	Medium	

# 18. Connect open space areas with conservation corridors.

**FINDINGS:** Large sections of greenways exist throughout the watershed. The longest one is found on the Skokie River in Cook County. Another greenway of nearly equal length has been assembled over the last 30 years along the Middle Fork through Lake Forest, Bannockburn, and Highland Park. A shorter segment runs along the Skokie River through Lake Forest and Lake Bluff. These sections however do not form a continuous system. For example, in Lake Forest, two major forest preserves and over 100 acres of land trust holdings cannot be joined due to a key parcel not yet being preserved. The plan calls for preserving an additional 4,788 acres to form an extensive greenway system (Figure: 4.2).

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
18A. Convene a meeting of watershed municipalities, park, forest preserve, drainage districts, and private club and land trust properties that fall within the prospective greenway to brainstorm, identify opportunities and a strategy for cooperative ventures to protect and connect the greenway corridors within each tributary subwatershed.	NBPC, Coordinators	2006	High	
18B. Form a multi-jurisdictional partnership to develop funding packages and grant proposals to implement each of the greenway protection/connection strategies that are the result of 18A.	Coordinators	2006-2007	Medium	

### GOAL 6: IMPROVE RECREATION AND EDUCATION OPPORTUNITIES IN UNDER-SERVED AREAS AND PROVIDE FOR A GROWING POPULATION

#### **OBJECTIVES:**

# 19. Educate the public on the benefits open space provides to meet the goals of reducing flooding, improving water quality, protecting biodiversity, habitat restoration, education and recreation.

FINDINGS: Watershed education activities are in their infancy, largely expounded by existing land trusts and other non-profit organizations. Education/outreach must be greatly expanded.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
19A. Sponsor a native landscaping/restoration/property management workshop targeting the owners of large landscapes including golf courses, schools, business campuses, hospitals etc.	Friends, NBPC	2006	Medium	
19B. Work with CRSN to incorporate open space functions/benefits as a specific topic in the Chicago River programs and curricula.	Friends, NBPC	2006	Low	
19C. Increase focus on habitat restoration during annual Chicago River Day and include habitat restoration as a major focus of the Adopt-a-River program.	Friends, NBPC	2006	Low	

# 20. Provide east-west and north-south trail connections within and between communities, institutions and to established regional trails.

FINDINGS: Research has revealed the following:

- The watershed is only partly accessible. There are currently 59 miles of trails, all concentrated in discontinuous open space holdings. Large parts of the watershed have no trail access at all.
- To the east and west of the watershed exist nearly continuous trail systems extending from Chicago proper to the Illinois/Wisconsin line. There is little formal access to these recreational opportunities from the watershed.
- Highland Park, Bannockburn, and North Chicago have plans for expanding trails and greenways systems within their borders.

The plan calls for an additional 127 miles of trails and shows how a continuous north-south regional trail system can be established the entire length of all three forks of the North Branch (Figure 4.3). Additional regional trails can be provided by rights-of-way properties.

East-west connections to the Des Plaines River Trail to the west, and the John Porter (also known as the North Shore and/or Robert McClory) Trail to the east can be provided the length of the watershed, though they will be limited largely to sidewalks along existing streets.

Local trails can be tied into the North Branch system throughout the watershed. These would include sidewalk "feeder" trails serving local parks and schools.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
20A. Review Chicago Area Transit System (CATS), municipal and park district trail plans and compare to trail recommendations in watershed open space plan.	NBPC	2005	Medium	
20B. Host a meeting with watershed municipalities, park districts, forest preserve districts and county and regional transportation agencies to determine interest in pursuing trail development and connecting existing trails in the watershed.	NBPC, Coordinators	2006	Medium	
20C. Complete the first continuous north-south trail in the watershed in the Skokie River corridor by extending the trail north from Route 176.	Forest Preserves, Park Districts, Municipalities, Golf Courses, LCDOT, Lake Bluff Open Lands	2010	Medium	
20D. Expand and connect a north-south trail in the Middle Fork corridor from the former Lakehurst Mall site south to Deerfield High School that also connects Middle Fork Savanna and Prairie Wolf Forest Preserves.	Forest Preserves, Park Districts, Municipalities, Lake Forest Open Lands	2015	Medium	
20E. Identify the best location for and install an east- west connection to the Des Plaines River trail in the southern part of Lake County.	LC Forest Preserve, Lincolnshire, Bannockburn, Riverwoods, Lake Forest, Deerfield	2008	Medium	

# 21. Identify current and future active and passive recreation needs and match with appropriate open space areas.

**FINDINGS:** General observations:

- The bulk of the public open space parcels are arranged in north-south formations, generally forming a greenway following the streams in the subwatersheds.
- Public open space corridors are more prevalent in Cook County, while Lake County public open spaces tend to form "islands."
- There is little public open space in the northern quarter of the watershed.
- Most public open space appears to lie within the Skokie River and Middle Fork subwatersheds, with little present in the West Fork subwatershed.
- Demand for recreation will increase as the 1990 population in the Lake County portion of the watershed is expected to increase 45% by 2020.

The designed greenway and trails system and management recommendations will greatly expand active and passive recreation opportunities.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
21A. Identify recreation needs based on projected 2030 population in the watershed and assess land protection needs to meet the desired level of service for active and passive recreation in 2030.	Park Districts, Municipalities	2006	High	

# 22. Identify open space parcels adjacent to or near schools or existing public facilities that would be appropriate for outdoor education and recreation.

FINDINGS: The open space inventory revealed a number of open and partially open parcels near school district lands.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
22A. Identify unmet outdoor education & recreation needs for schools.	School Districts, Park Districts, Municipalities	2006	Medium	
22B. Protect critical unprotected open space for education purposes and identify potential locations for outdoor education uses on open space within walking distance of each school.	School Districts, Park Districts, Municipalities	2010	Medium	

### GOAL 7: INTEGRATE AND COORDINATE OPEN SPACE PROTECTION AT THE WATERSHED SCALE

### **OBJECTIVES:**

# 23. Prioritize open and partially open space parcels at the watershed scale that need to be maintained and protected to meet the current and future green infrastructure needs of watershed communities.

FINDINGS: All open and partially open parcels were prioritized according to a set of criteria. A total of 17 criteria were applied to open and partially open parcels in Lake County and a total of 14 criteria were applied to parcels in Cook County. Results identify protection and management opportunities for individual parcels.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
23A. Develop and map open space priorities for the watershed based on multiple open space benefits.	Futurity	2003	High	Complete
23B. Identify and designate a lead person from each municipality, park district, county, forest preserve district, drainage district and conservation organization to serve as the watershed open space plan "Coordinator" for each group along with a representative of the naval base and key private landowners.	NBPC	2005	High	

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
23C. Develop and map a green infrastructure plan for each community based on open space plan findings and incorporate into community comprehensive land use plan. Identify highest priority parcels for protection with associated community action recommendations.	Municipalities, Counties	2006	High	
23D. Prioritize green infrastructure actions annually for implementation and include funding for green infrastructure needs in municipal and county budgets.	Municipalities, Counties	Annually	High	
23E. Identify funding mechanisms and work cooperatively to provide cost-share funding for protecting open space included within a community's green infrastructure plan.	NBPC, Coordinators	2006	High	
23F. Tie open space plan recommendations into all hazards/flood mitigation planning.	SMC	2010	Medium	

# 24. Generate community support and improve public relations for open space protection by creating awareness in communities within the watershed.

FINDINGS: Current outreach is fragmented and rudimentary. Friends of the Chicago River promotes the Chicago River Schools Network program, and several land trusts, nature centers and schools use the river for programs as well. However, the river itself is seldom identified at road crossings. SMC and FOCR should undertake new initiatives to heighten public awareness, building on the August 2001 North Branch Chicago River Watershed map/ brochure. Chapter 3 includes photographs of outreach examples in other regions.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
24A. Develop and implement a marketing plan to promote the open space plan that will promote its benefits and also serve to educate/train local officials on how to use the plan.	Friends, NBPC	2005	Medium	
24B. Hold a kick-off meeting for all key stakeholders incl. municipalities, forest preserve districts and park districts as soon as plan is complete. Final open space plan will be distributed at the meeting.	NBPC	2005	High	
24C. Approach municipalities individually to determine how the open space plan fits into their comprehensive land use plans and proposed development review process, and to encourage incorporation of open space protection into comprehensive plans.	NBPC	2006	High	
24D. Develop several customized "recipes" through an interactive process with communities for community incorporation and implementation of the open space plan. (Recipe examples may include flagging high priority open space parcels on all development maps and/or developing an individual community open space plan.)	NBPC, (Marketing Contractor)	2006	Medium	
24E. Present the open space plan to each municipality and park district in the watershed (plan commissions, councils or boards, and park district boards).	Friends, SMC	2006	Medium	
24F. Champion watershed open space implementation within your community and coordinate with other jurisdictions on open space protection/ restoration projects.	Coordinators	Ongoing	High	
24G. Work with Debra Shore of Chicago Wilderness to promote North Branch open space protection efforts in an article in Chicago Wilderness Magazine.	Anne Flannigan Bassi, SMC, Friends	2005	Medium	

# 25. Identify open space and partially open space parcels that include an archeological site, historic building or cultural resources.

**FINDINGS:** There are:

- 1,217 open parcels (9,167 acres) that intersect with areas believed to possess a high archaeological potential.
- 255 partially open parcels (1,987 acres) that intersect with areas believed to possess a high archaeological potential.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
25A. Work with state historic authority to determine a way to disseminate information to municipalities for their consideration in site development review, and to incorporate into comprehensive land use plans.	NBPC	2006	Low	

# 26. Develop a variety of open space preservation strategies that are flexible to meet the demands of landowners and maximize funding alternatives for different types and priorities of open space, and that balance private property rights with the public interest.

**FINDINGS:** The Lake County Forest Preserve District, local land trusts, and several communities (ex. Lincolnshire, Lake Forest) continue to preserve land using some of the techniques outlined in Chapter 3. Also numerous groups are carrying out state-of-the-art best management practices (BMPs) in the watershed, aided by a variety of funding sources (see Chapter 5). The Village of Northbrook is a good example of a recent river enhancement project

Chapter 3 outlines a full array of land preservation techniques and funding sources. Greatly expand the use of these for open space protection & enhancement.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
26A. Research potential open space preservation strategies and fund sources, and identify those that are applicable in the North Branch watershed and disseminate information to appropriate lead stakeholders.	NBPC, Friends, SMC	2006	Medium	

# 27. Provide a management vehicle for implementing the open space plan, and for monitoring progress on its implementation.

**FINDINGS:** Several communities, in some cases aided by local land trusts, have done an admirable job of protecting open space. (See Planning Areas 3, 5, and 7 for examples of work done in Lincolnshire, Lake Forest, and Lake Bluff.) In addition the SMC has encouraged similar work in the Lake County portion of the watershed. There still remains no cohesive plan to assemble greenways for the entire watershed. Discussed in Chapter 5.

ACTION	LEAD	TARGET DATE	PRIORITY	STATUS
27A. Convene meeting of North Branch open space planning committee with stakeholders representing LCFPD, CCFPD, park districts, municipalities and conservation organizations to form a working subcommittee to develop an implementation strategy and potential management vehicles (including evaluating implementation and updating the plan). (Will include the formation of this subcommittee as an agenda item for the kick-off meeting — 24B above).	NBPC, Coordinators	2005	High	
27B. Schedule a series of guest speakers for NBPC meetings that represent successful open space protection projects and potential funding sources for open space protection.	Friends, SMC	Ongoing	Medium	

# Top 5 Next Steps for Watershed Communities (Incl. Districts & Other Organizations)

- 1. Assess where your community currently stands relative to meeting the watershed goal of preserving 25% of land area as open space.
- 2. Review the Action Plan recommendations for your community in concert with your existing long range land use plan.
- 3. Present your findings/recommendations on necessary changes to your community's land use plan that will be needed to preserve open space to your community leaders (ex. Director, Mayor and Board or Council).
- 4. Incorporate open space preservation changes into the long-range land use plan and associated land development maps (zoning, open space etc.) for your community or organization, and include green infrastructure project needs in your long range and annual capital budgets.
- 5. Designate an appropriate community/organization representative to the North Branch Plan Committee as your open space "Coordinator" to coordinate and collaborate with other watershed stakeholders on open space projects in the watershed.

# **Parcel-Level Open Space Action Plan**

There is a definite need for overall coordination of preservation and management efforts for open space as discussed in Chapter 5. To make this easier, the open space plan has divided the North Branch watershed into 14 planning areas (*Figure 4.4*), generally consisting of two to three municipalities clustered together or, depending on size, a single municipality. This has been done to provide a detailed understanding of the watershed by each municipality and to facilitate subsequent action by them. Maps and recommendations for the individual planning areas follow in this section of the report. While these parcel-level recommendations are fairly comprehensive, they do not cover all the open space preservation possibilities or priorities for each community. It will be up to individual communities to use the Planning Area open space inventory, watershed priorities, and recommended actions as a base for developing and mapping a green infrastructure plan for their community.

In each planning area, the action recommendations identify high priority parcels for specific plan goals. However the plan DOES NOT rank these properties in any order of ascending or descending importance. This reflects the view that such decisions must be made by the local lead jurisdiction based on timing, opportunity, and local conditions and preferences.

Similarly, these open space recommendations use the general term "preserve" when referring to protecting properties of importance. They DO NOT say "purchase," "acquire," or use other specific language. Nor do the recommendations indicate what party or parties should "preserve" a specific parcel. Every property transaction is a special, multi-faceted encounter that may be accomplished through a variety of different means and by different persons or groups. As an extreme example, a

landowner may be willing to donate a parcel in fee simple or place a conservation easement on it, and may have preferences to whom he or she would extend such an offer. If the action recommendation were to specify a particular purchaser, for example "forest preserve district purchase", and the landowner does not whish toe sell to the forest preserve district, such a statement automatically restricts contact and subsequent negotiations with the landowner from the very start.

Again, it is the planning committee's role to advocate for preserving green infrastructure (open space) in the watershed, to educate key open space protection stakeholders, and to coordinate land protection activities among stakeholder jurisdictions.

### Conclusion

Open space opportunities in this highly urbanized watershed are diminishing rapidly. There is a great urgency to assemble a comprehensive watershed landscape of green infrastructure addressing the goals of this project: water quality, flood control, wetland protection, biodiversity, and public use.

The open space plan presents a unified holistic approach to the above issues through the rigorously applied concepts of inclusiveness and connectivity. Parcels rated highly for certain project goals become supporters of other parcels rated high for different goals. All parcels work together to support the plan goals.

Thus both watershed-level and municipal-level recommendations are interconnected. Individual parcels, managed as wetlands or grasslands, will serve to maintain or improve water quality and limit the occurrence of floods on the watershed level. A greenways and trails system will serve to buffer and connect isolated species habitat. This strategy, in-turn, directly reflects the qualitative and quantitative goals and objectives of the open space plan.

### **Planning Areas**

The North Branch watershed was divided into 14 planning areas, generally consisting of two to three municipalities clustered together or, depending on size, a single municipality. Maps and recommendations for these areas follow. Each map is keyed to specific actions, described in the text and, where applicable, tied back to specific actions recommended in the original Watershed Plan for Lake County.